



Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

MEMORANDUM

To: See Distribution
From: Mark Wissinger, P.E.
Construction Engineer
Date: June 29th, 2006
Subject: Supplemental Specification Revision: 704.01.5 Treated Timber Posts, 704.01.6
Treated Timber Poles, 704.01.7 Barn Poles

The Construction Administration Services Bureau is proposing revisions to Standard Specifications, 704.01.5 Treated Timber Posts, 704.01.6 Treated Timber Poles, 704.01.7 Barn Poles. Following the Standard Specification Revision Process outlined in the Construction Engineer's Memorandum dated January 9, 2002 the following information is provided.

1. Standard Specifications: 704.01.5 Treated Timber Posts, 704.01.6 Treated Timber Poles, and 704.01.7 Barn Poles will be modified.
2. The Proposed Draft of the changes is attached along with this memorandum.
3. Revision to the Standard Specification is needed to align MDT standards with current AWWA standards.
4. Those impacted by the change include:
 - Materials Timber Inspectors
 - Suppliers
5. The following individuals were consulted and/or involved in developing the proposed revisions:
 - Anson Moffett – Quality Control Engineer
 - Pat Hoy – Timber Inspector

*It is requested that comments on **the proposed revisions only**, be returned to the Specification Section no later than July 31st, 2006.*

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704.01.5 Treated Timber Posts

Furnish treated timber posts of construction grade, S4S, full length pressure treated with a five percent by weight pentachlorophenol solution or Chromate Copper Arsenate (CCA), Type B or C, or Ammoniacal Copper Arsenate (ACA) or Copper Naphthenate (CuN) meeting AWP standards and Subsection 706.04. Perform all cutting, trimming and boring, excluding the breakaway hole, before treatment. Assure individual posts are uniform in color for each project. The posts will be inspected where treated.

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Treat injuries, cuts, and holes in posts after treatment with three applications of copper naphthenate solution containing a minimum two percent copper metal or with Chromate Copper Arsenate (CCA) meeting AWP M4 requirements.

704.01.6 Treated Timber Poles

Furnish treated timber poles meeting ANSI Specification 05.1 and of the species listed in Table 4, 5, or 6. All poles on each project must be the same species and uniform in color after treatment. Machine-peel and full-length pressure treat all poles with a five percent by weight pentachlorophenol solution or CCA (Type B or C), or ACA or CuN as specified in AWPA Standards and Commodity specification D with retention specifications from Commodity specification B Use Category 4A. Gain each pole on the sign face as specified in the Detailed Drawings.

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Deleted: Poles may be gained full-length, or half gained from the top.

Use pressure treated, construction grade 2-inch x 4-inch (50 mm x 105 mm) in S4S for back bracing.

Treat poles, damaged, cut, or bored after treatment meeting Subsection 704.01.5 requirements.

704.01.7 Barn Poles

Barn poles are specified by the top diameter. Meet the following table 704-2 top diameter limits:

TABLE 704-2
BARN POLE - TOP DIAMETER LIMITS

| SPECIFIED TOP DIAMETER inch (mm) | DIAMETER LIMITS inch (mm) | |
|--|------------------------------|---------|
| | Min. | Max. |
| 3 (75) | 3 (75) | 4 (100) |
| 4 (100) | 4 (100) | 5 (130) |
| 5 (130) | 5 (130) | 6 (150) |
| 6 (150) | 6 (150) | 7 (180) |

Furnish poles that are straight so that a line from center of tip to center of butt passes through the pole body from tip to butt. The poles must be free of crooks and sweeps.

Perform all machining before treatment. Ensure all round post have a minimum of 1/2" of sapwood unless it naturally occurs thinner. Full length pressure treat all barn poles with

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a 5 percent by weight pentachlorophenol solution or Chromate Copper Arsenate (CCA), Type B or C, or Ammoniacal Copper Arsenate (ACA) [or Copper Naphthenate \(CuN\)](#) meeting AWPA standards and [Commodity Specification D with retention specifications from Commodity specification B Use Category 4A.](#)

Deleted: Subsection 706.04.1 requirements.

Treat damaged, cut, or bored holes in treated posts meeting Subsection 704.01.5 requirements. Gain each pole on the sign face at least 2 inches (50 mm) in width as specified [in the Detailed Drawings.](#)

Deleted: The post may be gained full length or half-gained from the top.

Use pressure treated, construction grade 2-inch x 4-inch (50 x 105 mm) in S4S for back bracing.